SUPPLEMENTAL SECTION A

GENERAL STANDARD OPERATING PROCEDURES FOR USING CHEMICAL CARTRIDGE RESPIRATORS

1. INTRODUCTION

The following is provided as **general guidance** for the use of chemical cartridge respirators. All respirator users should be familiar with the specific requirements of his/her written respiratory protection program and OSHA 29 CFR 1910.139 before using a respirator. Chemical cartridge respirators can only be used for protection against specific individual or classes of chemicals as specified by the manufacturer and cannot be used above the airborne concentrations indicated on the cartridge or in oxygen deficient atmospheres.

The following is a partial list of chemicals (as vapors and gases) for which chemical cartridge respirators should **NOT** be used for respiratory protection regardless of the airborne concentration or time of exposure. Refer to the manufacturer's instructions for additional chemicals.

- acrolein
- aniline
- arsine
- bromine
- carbon disulfide
- carbon monoxide
- dimethylaniline
- dimethyl sulfate
- dimethyl sulfide
- formaldehyde
- hydrogen cyanide
- hydrogen fluoride
- hydrogen selenide
- hydrogen sulfide
- methanol
- methyl bromide
- methyl chloride
- methylene biphenyl isocyanate
- methylene chloride
- nickel carbonyl
- nitro compounds
- nitrobenzene
- nitrogen oxides
- nitroglycerin
- nitromethane
- ozone
- phosgene
- phosphine
- phosphorus trichloride
- stibine
- sulfur chloride
- toluene diisocyanate
- vinyl chloride

Chemical cartridge respirators must not be used in atmospheres with less than 19.5% oxygen, in atmospheres immediately dangerous to life or health, or for rescue work. The useful life of cartridges must be determined for each type of material and application. Chemical cartridges cannot be used for chemicals or gases having poor warning properties or where high heats of reaction with sorbant material in the cartridge will be generated.

2. RESPIRATOR USER INSTRUCTIONS

The following instructions assume the respirator user has been previously fit tested, issued medical clearance, and has been assigned a respirator appropriate for the hazards to which he/she will be exposed:

a. To don a half-mask respirator, place the bottom strap around the head just below the ears. If necessary, untwist the strap and take in the slack by lightly pulling both ends of the strap through the buckles on both sides of the respirator.

b. Position the respirator on the face by placing the facepiece over the chin. Make sure the respirator fits low on the nose. Place the second strap over the head to secure the respirator in position. The narrow, upper portion of the facepiece should cover and rest low on the nose. The wide, lower portion of the facepiece should be on the chin. Shake head slightly to “seat” respirator on the face.

c. To don a full-facepiece respirator, fully loosen the six headstraps, clasp temple and side straps with each respective hand as close to the facepiece as possible, and stretch straps over the head, fitting mask against chin first. Pull side straps as tightly as necessary to obtain a snug fit. Next pull temple straps and finally pull top forehead straps completing the seal against the face and forehead.

d. Perform positive and negative fit tests being careful not to disturb the position of the respirator. If a leak is detected, pull the top strap off and repeat the fitting procedure. If a leak is still detected the respirator may not be the proper size or may be damaged. Do NOT force the fit of a respirator by pulling the straps so tight that they are uncomfortable.

e. Ensure that the cartridges or filters you are using areapproved for the chemicals to which you will be exposed.

f. Replace cartridges at the first sign of odor penetration or irritation.

g. Upon completing work, carefully wash the respirator using a mild soap solution and warm water. Dry the respirator in a clean, uncontaminated work area.

h. Inspect the respirator for any worn or damaged parts.

i. Store clean, dry respirators in their designated storage area.

RESPIRATOR INSPECTION CHECKLIST

Respirator User Identification_____

Date of Inspection:_____Performed by:_____

Respirator Brand:_____Model:_____

Cartridges:_____

1) Is facepiece material flexible and free of cracks, tears, or warping? _____

2) Is facepiece seal area clean? _____

3) Are all buckles and straps present and intact? _____

4) Are inhalation valves present, clean, and in good condition? _____

5) Is the exhalation valve present, clean, and in good condition? _____

6) Is the exhalation valve cover present? _____

7) Are cartridge holders and retainers in good condition? _____

8) Are all necessary gaskets present? _____

9) Are the cartridges/prefilters the right ones for the chemical exposure? _____

10) Are the cartridge/prefilters in good condition and completely threaded into the holder? _____

11) Is the speaking diaphragm intact (if present)? _____

12) If full face, is the lens clear, free of cracks and not brittle? _____

13) If powered air-purifying respirator (PAPR), with hood, is hood properly assembled, clean, free from tears, and facepiece intact? _____

14) If PAPR, is hose assembly in good condition and are end connectors, gaskets, hose clamps, and o-rings present and secure? _____

15) If PAPR, is battery fully charged? _____

16) Is the respirator properly cleaned/sanitized? _____

17) Is the respirator properly stored (bags/lockers)? _____

CORRECTIVE ACTION:

Repair Made	Mfg. Part/Model No.	Cost

Signature:_____